

REMARKS

Applicants have claims 46-73 are pending. Applicants appreciate and thank the Examiner for allowing claims 46-48, 54, 55, 58 and 59. Complying with the Examiner's request, Applicants have amended claims 49, 61 and 65 to remove the redundancy, placing claims 49-53 and 60-69 in allowable form, as recognized by the Examiner in the Office Action. The amended claims add no new matter and do not present new issues requiring further consideration or search. The Examiner has rejected claims 56, 57 and 70-73 as obvious over a single reference. The Examiner's comments and rejections are addressed below.

The 35 U.S.C. § 103 (a) Rejections

The Examiner rejected claims 56, 57 and 70-73 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,846,695 ("Iwata"). Applicants respectfully traverse this rejection.

On page 3 of the Office Action the Examiner cites to Iwata column 3, line 18 - column 4, line 31 as the sole support for rejecting claims 56, 57 and 70-73. The Examiner claims that Iwata teaches a "cleaning composition" consisting essentially of (a) a choline hydroxide compound; (b) 0.1 to 4 percent hydroxylamine; and (c) water, which the Examiner states overlaps the claimed ranges, further alleging "a prima facie case of obviousness exists."

However, this is not the entire invention, as disclosed and claimed by Iwata. At column 4, lines 23-31 Iwata discloses the essential element (d) a sugar or sugar alcohol is in the range of 0.5 to 20% by weight, preferably 1 to 15% by weight, of the whole solution. Iwata further discloses that when the concentration of the sugar or the sugar alcohol is lower than the specified range, corrosion of the wiring material in the circuit cannot sufficiently be prevented. Iwata backs up this teaching with comparative example 2, using this example to show an unacceptable amount of metal corrosion when using a composition of 10% TMAH, 15% hydroxylamine, and 75% water – *without a sugar or sugar alcohol* to remove photoresist. *See*, Tables 1-1 and 1-2.

In further support of the essential nature of element (d) a sugar or sugar alcohol in the formulations disclosed by Iwata, comparative example 6 also shows unacceptable corrosion to the metal using the same formulation, without element (d), to remove residues of photoresist that have been ashed with oxygen plasma. *See* Tables 2-1 and 2-2. Furthermore, all other examples

that are suitable for removal without corrosion contain 10% or 15% sugar alcohol. With this mountain of evidence, the Examiner must realize that Iwata teaches a four component approach with (a) a choline compound, (b) hydroxylamine, (c) water, and (d) a sugar or sugar alcohol. Iwata teaches away from a three component system such as that claimed in claims 56, 57 and 70-73 of the present application. “As stated by Judge Learned Hand, ‘another’s experiment, imperfect and never perfected will not serve either as an anticipation or as part of the prior art, for it has not served to enrich it.’” *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 33 (Fed. Cir. 1985) (quoting *Picard v. United Aircraft Corp.*, 128 F.2d 632, 635 (2d Cir. 1942), *cert. denied*, 317 U.S. 651 (1942)).

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant – here, to eliminate element (d). *In re Gurley*, 31 U.S.P.Q.2d 1130, 1131 (Fed. Cir. 1994). A reference teaches away if it suggests that the line of development flowing from the reference’s disclosure is unlikely to produce the result sought by the applicant. *Id.*

Claims 56, 57 and 70-73 are to only elements (a), (b), and (c) – without (d). Iwata teaches that this would lead to corrosion of the metal and teaches not to do precisely what Applicants claim. This alone easily rebuts any *prima facie* case of obviousness. Indeed, it is the consummate case of rebutting an allegation of obviousness of a single reference where that reference teaches away from the claimed invention. For this reason alone claims 56, 57 and 70-73 should be allowed.

However, claims 56, 57 and 70-73 are not obvious for another reason. Claims 56, 57 and 70-73 claim a composition “consisting essentially of” (a), (b), and (c). Consisting essentially of renders the claim open to the inclusion of unspecified ingredients which do not materially affect the basic and novel characteristics of the composition. *See, Ex Parte Davis*, 80 U.S.P.Q. 448, 450 (B.P.A.I. 1948). Iwata makes it abundantly clear that (d) would materially affect the basic and novel characteristics of composition (a), (b), and (c) – namely, that without (d), the composition would corrode the metal substrate, with (d) it would not corrode the substrate. Without (d) the composition does not work, with (d) it does. The Examiner cannot have it both ways by citing Iwata as the same regarding (a), (b) and (c) and then not applying that same reasoning to element (d) to conclude that the “consisting essentially of” language of claims 56,

57 and 70-73 excludes element (d) and thereby is not obvious in view of Iwata. For this reason alone claims 56, 57 and 70-73 should be allowed.

However, claims 56, 57 and 70-73 are allowable for yet another reason, by achieving successful results – without corrosion of the metal substrate – by using only the three component composition of (a), (b) and (c). Applicants' achieve unexpected results in view of Iwata. By doing so, Applicants' show that claims 56, 57 and 70-73 are not obvious in view of Iwata.

For any of these reasons, claims 56, 57 and 70-73 are not obvious. With the cumulative force of all three, the weight of the evidence stacks dispositively in support of the allowability of claims 56, 57 and 70-73. Applicants' respectfully request that the Examiner reconsider and withdraw his rejection and allow claims 56, 57 and 70-73 in addition to the other claims.

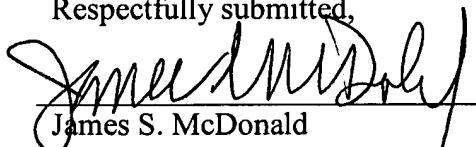
Conclusion

In light of the foregoing, the Examiner's objections to claims 49-53 and 60-69 and the Examiner's obviousness rejections to claims 56, 57 and 70-73, as alleged in the Office Action dated January 24, 2005, are overcome and obviated. Applicants request that the objections and rejections be withdrawn and that the claims be passed to allowance along with already allowed claims 46-48, 54, 55, 58 and 59.

If the Examiner believes a discussion of the above would be useful, he is invited to call the Applicant's attorney, James McDonald, at (212) 309-6719.

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Respectfully submitted,



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